

What is claimed is:

1. An image monitor apparatus for monitoring an image, comprising:

a camera which picks up an image;

5 an illumination unit which includes,

a light emission unit having at least one light emitting element, and

an emission control unit which controls the at least one light emitting element; and

10 a processing unit which includes,

an image signal acquiring unit which performs analog-to-digital conversion of said image picked up by said camera so as to generate a digitized image signal, and stores the digitized image signal,

15 a luminance examining unit which examines luminance of the image represented by said digitized image signal, and determines whether or not an amount of light detected by said camera and stored in an image-pickup plane of the camera is appropriate, and

20 a luminance control unit which controls at least one of said camera and said illumination unit so that said amount of light becomes appropriate for suppressing disturbances in said image, when said luminance examining unit determines that the amount of light detected by said  
25 camera and stored in the image-pickup plane is not appropriate for suppressing disturbances in said image.

2. An image monitor apparatus according to claim 1,  
wherein said luminance control unit makes feedback control  
of said camera so that a shutter speed of said camera is  
increased within such a range that a duration in which a  
5 shutter of the camera is open is not shorter than a duration  
of illumination by the illumination unit, and an iris  
opening of said camera is maximized.

3. An image monitor apparatus according to claim 2,  
10 wherein when said amount of light cannot become appropriate  
for suppressing disturbances in the image even when said  
shutter speed of said camera is increased by said feedback  
control to said duration of illumination, said luminance  
control unit increases an amount of light emitted by said  
15 illumination unit, and reduces the size of the iris opening.

4. An image monitor apparatus according to claim 1,  
wherein said luminance control unit controls said  
illumination unit so that the at least one light emitting  
20 element emits light only when an image of a frame which is  
necessary for image processing is picked up by the camera.

5. An image monitor apparatus according to claim 1,  
wherein said luminance control unit automatically detects  
25 blooming or smearing in said image based on said luminance  
of the image.